What is claimed is:

- A method for operating a synchronous memory comprising:
 performing an initialization operation on the synchronous memory;
 setting a content of a status register to a first state while the initialization
 operation is being performed; and
 setting the content of the status register to a second state when the initialization
 operation is completed.
- 2. The method of claim 1 wherein the initialization operation is performed in response to an externally provided signal.
- 3. The method of claim 1 further comprises outputting the contents of the status register on an external connection in response to a status register read command.
- 4. The method of claim 1 wherein the initialization operation comprises: reading data stored in non-volatile fuse elements; and storing the data read from the non-volatile elements in at least one data register.
- 5. The method of claim 1 wherein the first state is a logical 1 and the second state is a logical 0.
- 6. A method for operating a memory system comprising: initiating an initialization operation on a synchronous memory; setting a first bit of a status register of the synchronous memory to a first state when the initialization operation is initiated; setting the first bit of the status register to a second state when the initialization operation is completed; providing a status register read command with an external memory controller; and

outputting the contents of the status register on an external connection in response to the status register read command.

- 7. The method of claim 6 wherein the initialization operation comprises: reading data stored in non-volatile fuse elements; and storing the data read from the non-volatile elements in at least one data register.
- 8. The method of claim 6 wherein the initialization operation is performed in response to an externally provided signal from the memory controller.
- 9. The method of claim 6 wherein the synchronous memory is a non-volatile memory.
- 10. The method of claim 9 wherein the non-volatile memory is a flash memory.
- 11. A method for operating a memory system comprising: initiating an initialization operation on a memory device; and monitoring a memory status register to determine when the initialization operation is completed.
- 12. The method of claim 11 wherein initiating and monitoring is performed by a memory controller coupled to the memory device.
- 13. The method of claim 11 wherein monitoring the memory status register comprises:

performing a status read command on the status register; determining a state of a first bit of the status register; and if the first bit is in a predetermined state, indicating that the initialization operation has ended. 14. The method of claim 11 wherein monitoring the memory status register comprises:

performing a status read command on the status register; determining a state of a plurality of bits of the status register; and if each of the plurality of bits are in predetermined states, indicating that the initialization operation has ended.

- 15. The method of claim 11 and further including outputting the memory status register to a data output connection.
- 16. The method of claim 11 wherein the memory device is compatible with synchronous dynamic random access memory package pin assignments.
- 17. The method of claim 14 wherein a memory controller performs the status read command and determines the state of the plurality of bits.
- 18. The method of claim 13 wherein monitoring the memory status register is performed by a memory controller over a bidirectional data bus.
- 19. The method of claim 11 wherein the initialization operation on the memory device is performed by an internal state machine.
- 20. The method of claim 11 wherein the memory status register is updated in response to completion of the initialization operation and synchronous with a clock signal coupled to the memory device.